

# Twelfth International Conference on Digital Information Management (ICDIM 2017)

Venue: The Kyushu University School of Medicine Centennial Hall, Kyushu University,  
Fukuoka

(<http://www.med.kyushu-u.ac.jp/100ko-do/english/>)

September 12- 14, 2017

## Preliminary Program

<b>September 12, 2017 - Day I</b>
<b>09:00 – 09:30 - Registration</b>
<b>09:30-09:40 - Opening Ceremony</b>
<b>09:40-10:30 - Keynote 1- Jolanta Mizera-Pietraszka on Modeling Swarm – Intelligent Systems for Medical Applications</b>
<b>10:30 - 10:40 - Coffee Break</b>
<b>10:40-11:30 - Keynote 2- Kazutoshi Sumiya on Less-Conscious Information Retrieval Techniques for Location Based Services</b>

### Session I A - Information Visualization

**11:30-11:50** - Mining and Visualization of Interpersonal Interaction Networks - *SeungJin Lim (United States)*

**11:50-12:10** - Measurement and Analysis of Citizens Requests to Government for Non-Emergency Services - *Rami Ibrahim, M. Omair Shafiq(Canada)*

**12:10-12:30** - DREAM: Dynamic data Relations Extraction using Adaptive Multi-agent systems - *Elhadi Belghache (France)*

### Session I B - Knowledge Management

**11:30-11:50** - Rumor Verifications on Facebook: Click Speech of Likes, Comments and Shares - *Alton Chua, Snehasish Banerjee (Singapore)*

**11:50-12:10** - Types Measuring uncertainty to identify missing customer information relevant to the design process - *Anna Marti Bigorra (Sweden)*

**12:10-12:30** - Scientific Visualizer in personal information management - *Veslava Osinska, Grzegorz Osinski (Poland)*

**12:30 - 14:00 - Lunch**

### Session II A - Natural Language Processing

**14:00-14:20** - Message Content in the Life of Rumors: Comparing Three Rumor - *Alton, Y.K. Chua, Rajiv Aricat, Dion Goh (Singapore)*

**14:20-14:40** - Exploring NLP Web APIs for Building Arabic Systems - *Sharefah Al-Ghamdi, Joharah Khabti, Hend Al-Khalifa (Saudi Arabia)*

**14:40-15:00** - Syntactical role identification of mathematical expressions - *Xing Wang, Jason Lin, Ryan Vrecenar, Jyh-Charn Liu (United States)*

**15:00-15:20** - Analysing the Influence of Semantic Knowledge in Natural Language Generation - *Cristina Barros, Elena Lloret (Spain)*

**15:20-15:40** - Two-level Dynamic Index Pruning - *Michael Petrifke, Jan Friedrich, Christoph Lindemann (Germany)*

**15:40-16:00** - Toward Plagiarism Detection Using Citation Networks- *Sidik Soleman, Atsushi Fujii (Japan)*

**16:00-16:20** - Spell Corrector to Social Media Datasets in Message Filtering Systems - *Zar Zar Wint, Théo Ducros, Masayoshi Aritsugi (Japan)*

### Session II B- Image Processing AND E-Learning

**14:00-14:20** - Improvement of complete malaria cell image segmentation- *Monlica Wattana, Tipwalee Boonsri (Thailand)*

**14:20-14:40** - Offline Touched Cursive Script Segmentation Based on Pixel Intensity Analysis- *Amjad Rehman, (Saudi Arabia)*

**14:40-15:40** - National Analysis of Japanese Universities on Computing Education (**A Series of Papers**): *(Mika Ohtsuki, Mitsuhiro Takasaki, Tetsuro Kakeshita (Japan)*

**16:20 - 16:40 - Coffee Break**

**Session III A1 - Workshop on DWIM**

**16:40-17:00** - Analysis Based on Japanese Accented English Characteristics Categories for Objective Evaluation -*Hajime Tsubaki (Japan)*

**17:00-17:20** - A Content-Constrained Spatial Model for Layout Analysis of Mathematical Expressions- *Xing Wang (US)*

**Session III A2 - Data Management**

**17:20-17:40** - An Improved Algorithm for Transmission in Heterogeneous Cellular Networks -*Yao-Liang Chung (Taiwan)*

**17:40-18:00** - A Collaborative Filtering Method for Interactive Platforms-*Yan Zhou, Taketoshi Ushiyama (Japan)*

**18:00-18:20** - A Migration-oriented Partial Adaptation Architecture for IoT-empowered City Platform as a Service -*Toshihiko Yamakami (Japan)*

**Session III B - Workshop on Future Big Data**

**16:40-17:00** - Prediction of Importance of Figures in Scholarly Papers- *Yui Kita, Jun Rekimoto (Japan)*

**17:00-17:20** - Fast Plagiarism Detection Based on Simple Document Similarity- *Kensuke Baba (Japan)*

**17:20-17:40** - CRF-Based Bibliography Extraction from Reference Strings Using a Small Amount of Training Data- *Daiki Namikoshi, Manabu Ohta, Atsuhiko Takasu, Jun Adachi (Japan)*

**17:40-18:00** - Stock Prices Fluctuation Analysis of Food Companies After the Great East-Japan Earthquake -*Application of Random Matrix Theory- Kenji Yamaguchi, Yukari Shirota (Japan)*

**18:30 – 20:30 - Welcome Reception**

**at Hall 3**

## September 13, 2017 - Day II

**09:30-10:00 Keynote 3- Michael W. Condry on Advancing in Technical Leadership**

**10:00 – 10:20 - Coffee Break**

### **Session IV A - Web Services and Metrics**

- 10:20-10:40** - Recommender System for Thai Food Cooking on Smartphone - *Hathairat Ketmaneechairat (Thailand)*
- 10:40-11:00** - Toward Positioning IoT-empowered Service Engineering in City Platform as a Service- *Toshihiko Yamakama (Japan)*
- 11:00-11:20** - Tweets of Thailand: A Tweet Retrieval System for Domestic Tourism in Thailand- *Rangsipan Marukatat, Nutthapon Chinchaipong, Sirapop Prechalertpriya (Thailand)*
- 11:20-11:40** - Identification of Opinion Leader on Rumor Spreading in Online Social Network Twitter Using Edge Weighting and Centrality Measure Weighting- *Fatia Dewi, Satrio Yudhoatmojo, Indra Budi (Indonesia)*
- 11:40-12:00** - Mobile Search Engine for Medicine Information on Smartphone - *Hathairat Ketmaneechairat, Kittithud Jongsiriworachot, Chanatip Thangtoon (Thailand)*
- 12:00-12:20** - Prototyping a Recommendation System for Ukiyo-e using Hybrid Recommendation Algorithm- *Pritish Patil, Jiayun Wang, Yuya Aratani, Kyoji Kawagoe (Japan)*

### **Session IV B - Data Mining and Data Warehousing**

- 10:20-10:40** - Item Recommending by Item Co-purchasing Network and User Preference- *Sunantha Sodsee, Maytiyanin Komkhao (Thailand)*
- 10:40-11:00** - Mining Affordance-based Substitution Rules: A Dynamic Taxonomy Approach- *Rupal Sethi, B Shekar (India)*
- 11:00-11:20** - DIO: Efficient Interactive Outlier Analysis over Dynamic Datasets- *Chihiro Sakazume, Hiroyuki Kitagawa, Toshiyuki Amagasa (Japan)*
- 11:20-11:40** - Mining and Ranking of Generalized Multi-Dimensional Frequent Subgraphs- *André Petermann, Giovanni Micale, Giacomo Bergami, Alfredo Pulvirenti, Erhard Rahm (Germany)*
- 11:40-12:00** - Analyzing Patterns of Numerously Occurring Heart Diseases Using Association Rule Mining- *Rashedur M Rahman (Bangladesh)*

**12:20 - 14:00 - Lunch**

### **Session V A - Access Control (1)**

- 14:00-14:20** - Urban park area feasibility analysis using fuzzy aggregation of multi-spatial criteria and multi-expert weights- *Arif Wicaksono, Sunya Sarapirome (Thailand)*
- 14:20-14:40** - Can you trust the user? - Collaborative Trust Estimation Model for Recommendations- *Daichi Minami, Taketoshi Ushiyama (Japan)*
- 14:40-15:00** - A HTTP Botnet Detection System Based on Ranking Mechanism - *Yuan-Chin Lee, Chuan-Mu Tseng, Tzong-Jye Liu (Taiwan)*
- 15:00-15:20** - Improving the trust of end users in enterprise SOA using combinatorial group testing methods - *Siba Mishra, Chiranjeev Kumar (India)*

### **Session V B - Mobile Data Management**

- 14:00-14:20** - Minimum node weight spanning trees searching algorithm for broadcast transmission in sensor networks - *Zbigniew Lipiński (Poland)*
- 14:20-14:40** - SCTP-based Service Migration for VOD Service - *Chin-Shiuh Shieh, Hao-Xiang Gu (Taiwan)*
- 14:40-15:00** - Transparent Mobility of Devices on the Internet using OpenFlow - *Pedro Braconnot Velloso, Gabriel A. de Oliveira, Peron R. de Sousa, Antonio Augusto de A. Rocha (Brazil)*
- 15:00-15:20** - On Cleaning and Organizing Context Logs for Mobile User Preference Profiling - *Yao-Chung Fan, Hung-Yuan Chen (Taiwan)*

**15:20-15:40 - Coffee Break**

### **Session VI A - Access Control (2)**

- 15:40-16:00** - Analysis and Compliance Evaluation of Cookies-Setting Websites with Privacy Protection Laws - *Adeyemi Aladeokin, Pavol Zavorsky, Neelam Memon (Canada)*
- 16:00-16:20** - Privacy-Preserved Conference Key Distribution Protocol - *Chien-Lung Hsu, Tzu-Wei Lin, Huang-Chia Lu (Taiwan)*
- 16:20-16:40** - A Dynamic Identity End-to-End Authentication Key Exchange Protocol for IoT Environments - *Tzu-Hsien Chuang, Chien-Lung Hsu, Yu-Han Chen, Tzu-Wei Lin, Huang-Chia Lu (Taiwan)*
- 16:40-17:00** - Cryptanalysis of an Authentication Scheme for Multi-Gateway Wireless Sensor Networks - *Taeui Song, Jaewook Jung, Dongwoo Kang, Hyoungshik Kim and Dongho Won (South Korea)*
- 17:00-17:20** - Compliance Evaluation of Information Privacy Protection in Anglophone West Africa Using ISO/IEC 29100:2011. A Case of E-Government Systems - *Pavol Zavorsky, Amarachi Chinwendu Nwaeze, Ron Ruhl (Canada)*

**Session VI B - Artificial Intelligence**

- 15:40-16:00** - Code Style Analytics for the Automatic Setting of Formatting Rules in IDEs - *Eric Torunski, Omair Shafiq, Anthony Whitehead (Canada)*
- 16:00-16:20** - Analysis of Criminal Behaviors for Suspect Vehicle Detection - *Ubon Thongsatapornwatana, Woraphon Lilakiatsakun, Akkarach Kawbunjun, Tossapon Boongoen (Thailand)*
- 16:20-16:40** - Shortest Path Deliveries Using Density-Based Clustering - *Lixin Fu (United States)*
- 16:40-17:00** - Classification of Computer Viruses from Binary Code using Ensemble Classifier and Recursive Feature Elimination - *Prasit Usaphapanus, Krerk Piromsopa (Thailand)*
- 17:00-17:20** - Factor Analysis of Investment Trust Products by Using Monthly Reports and News Articles - *Qiang Ma, Nobuaki Onishi (Japan)*

**18:30 – 20:30 - Conference Banquet and Award Ceremony**  
**at Hakata Hyakunengura**

**September 14, 2017 - Day III**

**08:45 -17:45 Tour**